

which flow matrix contains ion-exchange function by the action of ion-exchange functional groups selected from the group consisting of diethyl aminoethyl (DEAE), trimethyl hydroxypropyl (QA), quaternary aminoethyl (QAE), quaternary aminomethyl (Q), diethyl-(2-hydroxypropyl)-aminoethyl, triethyl aminomethyl (TEAE), triethylaminopropyl (TEAP), polyethyleneimine (PEI), methacrylate, carboxymethyl (CM) orthophosphate (P), sulfonate (S), sulfoethyl (SE) and sulfopropyl (SP), wherein the flow matrix is a porous polymer material with pores in the range of 0.01-20 μ m;

b) treating the flow matrix to reduce or eliminate nonspecific adsorption properties of the flow matrix;

c) applying to the flow matrix a sample containing at least two components;

d) initiating a first lateral flow of aqueous fluid to transport the sample through the flow matrix and separate the components therein;

e) interrupting said lateral flow; and either

f1) detecting at least one of said separated components on the flow matrix in the position reached by the respective component when the flow was interrupted; or

f2a) initiating a second flow of aqueous fluid to transport the components in a direction substantially transverse to the direction of the first lateral flow;

f2b) interrupting said second lateral flow; and

f2c) detecting at least one of said separated components on the flow matrix in the position reached by the respective components when the second lateral flow was interrupted.

8. (Amended) A chromatographic device comprising a polymeric membrane type flow matrix attached to a liquid-impervious backing, which membrane permits a capillary force assisted lateral flow therethrough and contains ion-exchange functional groups selected from the group consisting of diethyl aminoethyl (DEAE), trimethyl hydroxypropyl (QA), quaternary aminoethyl (QAE), quaternary aminomethyl (Q), diethyl-(2-hydroxypropyl)-aminoethyl, triethyl aminomethyl (TEAE), triethylaminopropyl (TEAP), polyethyleneimine (PEI), methacrylate, carboxymethyl (CM) orthophosphate (P), sulfonate (S), sulfoethyl (SE) and sulfopropyl (SP), wherein the flow matrix is a porous polymer material with pores in the range of 0.01-20 μ m.